

# Air inlet systems

No cold air drop on  
your animals



**FANCOM**<sup>®</sup>  
forward thinking

# Facts & Figures

45+

Years of experience

1600+

1600+ poultry houses annually

210+

Global network of distributors and partners

4900+

Sections for pigs annually

700

Growing rooms for mushrooms annually

1

Number one in farm automation



Proven Dutch quality:

Fancom is active in 4 market segment in 63 countries.

All our products are designed and developed in the Netherlands.



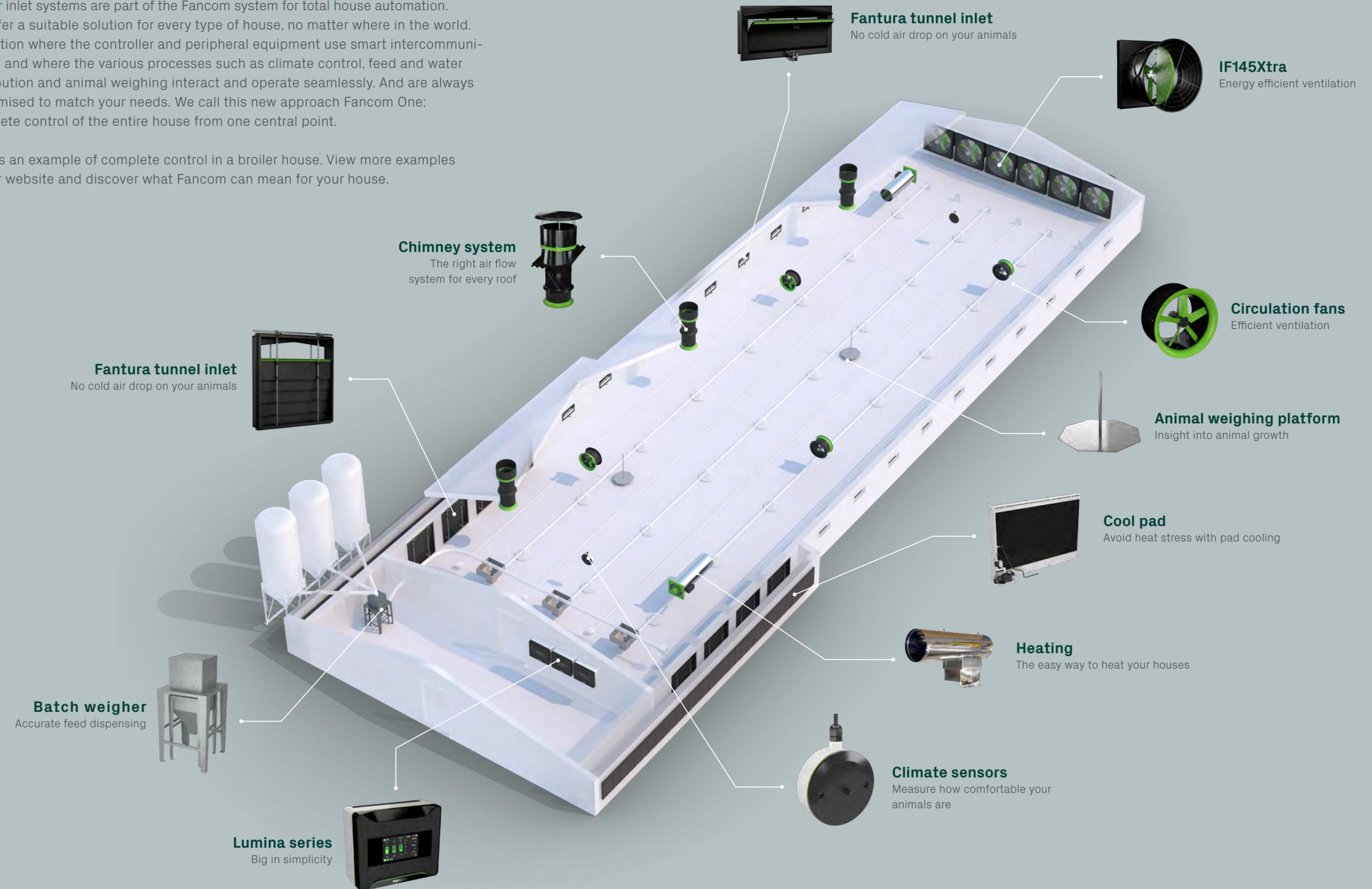
The creative and development processes at Fancom are entirely focussed on achieving superior conditions for pig and poultry producers. Creating the right conditions starts in the house.

FANCOM®

# Total house automation

Our air inlet systems are part of the Fancom system for total house automation. We offer a suitable solution for every type of house, no matter where in the world. A solution where the controller and peripheral equipment use smart intercommunication and where the various processes such as climate control, feed and water distribution and animal weighing interact and operate seamlessly. And are always customised to match your needs. We call this new approach Fancom One; complete control of the entire house from one central point.

Here is an example of complete control in a broiler house. View more examples on our website and discover what Fancom can mean for your house.



# Fresh air for all the animals in the house

The goal of every farmer is healthy animals that grow well. Supplying good air quality is vital, especially where the animals are housed. A continuous supply of fresh air without any draughts or rapid air flows contributes to the quality of the air at animal level.

## Comfortable for the animals

A suitable air inlet system not only determines how fresh air enters the building, but also how air is distributed throughout the house. A system with air inlets offers a wide range of possibilities. This system is also well suited to pre-heat or cool air before it enters the house. The correct air flow pattern is influenced by the size of the inlet opening and the position of the air inlet. The incoming air must have sufficient speed to travel along the ceiling towards the centre of the house where it can gradually mix with air already in the building. In this way, the air reaches the animals pre-warmed and at a low speed. During hot summer days, the direct flow of incoming air can be guided over the animals to prevent heat stress.



## A suitable solution for every house

Fancom offers an extensive range of air inlets that create a suitable solution in every type of house, for minimum ventilation, ceiling ventilation and tunnel ventilation. You can choose from two versions:

- The patented Fantura series of air inlet systems is distinguished by the special shape that bundles the incoming air for a better throw.
- The standard air inlets also deliver an outstanding performance and contribute to a better house climate.

## Improved animal performance

A properly controlled air inlet system promotes the performance of the animals. It also helps prevent diseases and issues such as respiratory problems, higher mortality, poor growth, bad litter or poor manure quality that can cause leg problems and more soiling. Behaviour sends important signals about whether animals feel comfortable and content. If the animals are well spread out throughout the house, you know the air quality is good in every part of the building.



# No cold air drop on your animals

The unique Fantura air inlet system is distinguished by the special shape of the inlet that bundles the incoming air for a better throw. Fantura ensures a constant and uniform supply of fresh air in the house in all conditions. Cold air no longer drops onto your animals and the litter stays nice and dry which eliminates foot problems. Your animals stay healthy, grow better and the even growth conditions improve uniformity. The Fantura air inlet system consists of an air inlet, an intelligent actuator and a smart control computer.

## Always enough fresh air in every part of your house

When a conventional air inlet is set to the minimum ventilation position, a long, narrow opening is created. The cold, incoming air has too little mass, and its flow speed decreases too rapidly so it drops onto the animals. A special jet stream formed by the Fantura air inlet valve changes the shape of the inlet into a compact, rectangular opening. The incoming air is bundled which creates a better throw so that all the animals in the house can benefit from sufficient supplies of fresh air. The system works fully automatically, which eliminates the need to close the inlets manually. This saves time and prevent errors.

## Aerodynamic

The aerodynamic housing is fitted with an air entry cone which reduces the air resistance. In combination with the jet stream, the Fantura air inlet valve delivers up to 30% more capacity. This means you can reduce the number of air inlets. This also has a positive effect on energy consumption.

## Years of trouble-free operation

The Fantura inlets are made from a special polyurethane. This ensures a high insulation value and an extra robust exterior. The special seals are dimensionally stable, wear-resistant, and will not expand or contract. This guarantees a perfect seal and optimal air control. Condensation and the inconvenience of frozen inlets will be a rare occurrence. You can rely on your ventilation system to provide years of trouble-free operation.

Your animals stay healthy, grow better and the even growth conditions improve uniformity.



# Fantura

## Fantura in every house

The Fantura air inlet system is available in four versions: a wall inlet, a ceiling inlet, a sliding inlet and a tunnel inlet. This enables Fancom to offer a suitable Fantura air inlet system for every type of house.



### Wall inlets

Wall inlets are built into the side wall of pig and poultry houses. The incoming air is directed to the ridge of the building where it mixes with the warm air in the house. There are two models, a plastic version ( $>-5^{\circ}\text{C}$ ) and an extra insulated PU version ( $>-35^{\circ}\text{C}$ ). The air inlet is spring-closed, which makes it easier to control in the minimum ventilation range and ensures an airtight seal when the inlet is closed.

### Sliding inlets

The sliding inlet has been specially designed for houses with nesting boxes, cages or other obstacles that can disrupt the air flow. To avoid obstacles in the house, the user can control the direction of the incoming air using four louvres that can be independently set in a certain position. The louvres click into the set position. They also stay in place when the house is being cleaned, for example. The capacity of the inlet is regulated using a plate that moves vertically. The special guide system prevents the plate from clamping. The plate is removable for proper cleaning. A Greenline version is also available in addition to the Fantura sliding inlet. This offers the same practical advantages, but without the special Fantura jet stream.



Watch the video explaining how our unique wall inlets work here

## Ceiling inlets

The ceiling inlet has been specially designed for wider houses with lowered ceilings and enables pre-treatment of the incoming air. A single and a double version is available. The special V-shaped inlet expels the fresh air so powerfully that a capacity of up to 80% flows horizontally along the ceiling. The incoming air can mix better with the air already in the house and prevent temperature fluctuations. Moreover, the ventilation system stays in an accurately controllable position for longer and only switches to tunnel ventilation if it is absolutely necessary. This not only saves energy, but also means the animals experience fewer draughts. There are fewer respiratory problems and the growth performance of the animals is better.



The Fantura tunnel inlet is specially for houses with tunnel ventilation where air flows over the animals at high speed and creates a cooling breeze.

## Years of trouble-free operation

With a capacity of no less than 38,000 m<sup>3</sup>, the Fantura tunnel inlet delivers a top performance. The inlet is airtight and well insulated and made of materials that are perfectly resistant to weather influences and the aggressive substances in the air inside the house. Users can rely on years of trouble-free operation.

## Also for minimum ventilation

The gradual opening action in combination with the inlet's unique shape also makes the tunnel inlet ideal for minimum ventilation. This effect is a good way of cutting costs as there is no need to install additional inlets above the tunnel inlet.



## Tunnel inlet

The Fantura tunnel inlet has a number of unique properties. What makes the tunnel inlet unique is the special way it opens. The panels slide smoothly from top to bottom and create a gradual increase in the flow of ventilation in the house. The clever design with the Fantura jet stream prevents incoming air from dropping directly onto the animals, so your animals can enjoy the cooling breeze effect of the air flow without any disruption.



Watch the video explaining how our unique tunnel inlets work here.

# Greenline air inlets

In addition to the Fantura air inlet valves, Fancom also offers two standard valves, suitable for pig and poultry houses. The wall mounted model is lightly insulated and suitable for regions with minimum temperatures above  $-5^{\circ}\text{C}$ . The most striking feature is the attractive price-performance ratio. The inlet is constructed fully from plastic, is easy to clean and has a long service life. The special shape of the inlet ensures a good air flow and delivers an excellent performance. The wall mounted model has spring hinges at the base. This ensures the inlet is fully closed in its closed position. A protective grille and connection kit are standard features.

## Simple installation

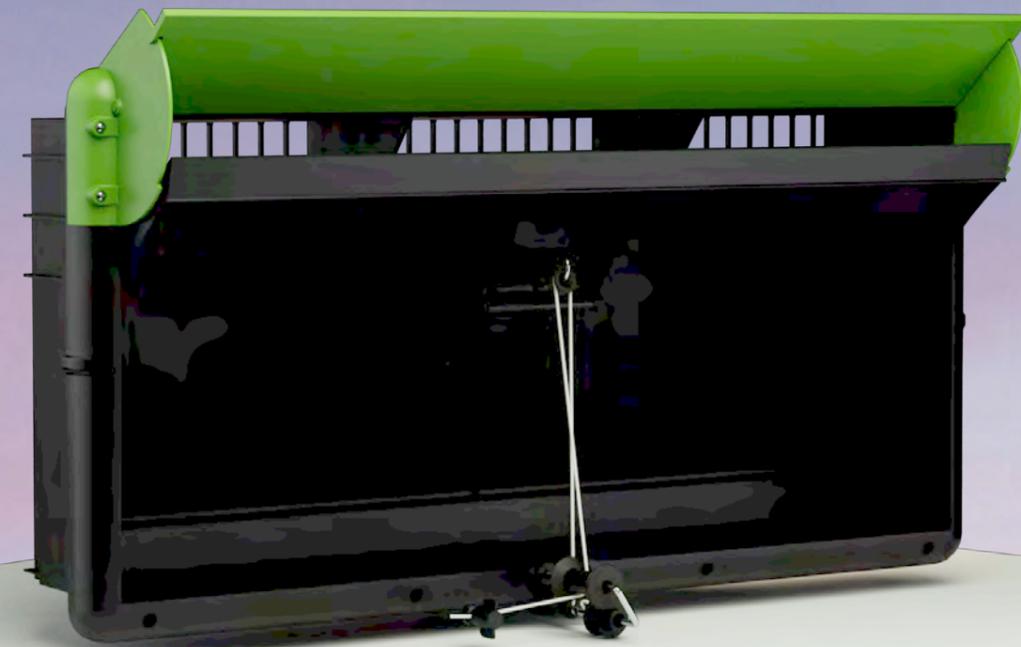
The inlet is easy to install in every type of wall using the mounting brackets supplied. The bracket for easy cable connection is also a standard feature of each inlet.

## Optimal minimum ventilation

The special construction at the cable connection allows the inlets to open in phases. This means that some of the inlets open later. Fewer open inlets in the minimum ventilation range means a higher air mass at the open inlets which creates a better throw.

## Deflector

The standard inlet is available in two versions. A deflector can be used with both versions to direct the incoming air flow better if there are any obstacles at the ridge of the house or with flat ceilings.



# Superior conditions in the house

The creative and development processes at Fancom are entirely focussed on achieving superior conditions for pig and poultry producers. And for mushroom growers. Creating the right conditions starts in the house. That is why we firmly believe in the value of total house automation. With smart house technology that manages and controls all the processes in the house from a central location. Ventilation and heating, feed and water distribution, lighting, animal weighing and egg counting - all controlled and monitored perfectly.

You can create insight by collecting and linking as much data as possible from these automated processes. Insight into animal health and behaviour, insight into feed and consumption, insight into growth and development. Valuable information that enables more efficient and profitable production in a way that respects animals and the environment.

In our opinion, there are no limits to what complete farm automation can do. Whatever our customers need to know - we can automate and measure it. And the more informed they are, the better control of animal welfare and results. Creating the right conditions for healthy and future-proof farming. Our ambition together with our customers is to ensure that whatever happens inside the house has an impact outside.

We call the driver behind creating an impact Forward Thinking - the way of thinking, acting and working that typifies Fancom. We set the bar high for ourselves and the people around us based on the belief that things can always get better. And must. Our automated

processes facilitate control inside the house. Outside the house, making a meaningful impact requires a thorough understanding of the challenges facing our customers. They operate in a sector that has to balance the interests and tensions of nature, technology, data, politics and social sentiment. Against the background of this dynamic, we challenge ourselves to develop ever-smarter systems. We are at the forefront of development and innovation. Yesterday, we provided the solutions to today's challenges. Today, we are working on the solutions to tomorrow's challenges. Always anticipating developments. This is precisely what we mean by Forward Thinking.

By combining the power of innovation, leadership, empathy and partnership, Fancom guarantees solutions that benefit operational management, people, animals and the environment. Today and tomorrow.

By combining the power of innovation, leadership, empathy and partnership, Fancom guarantees solutions that benefit operational management, people, animals and the environment. **Today and tomorrow.**



# Fancom air inlet systems all over the world



**The Netherlands**  
Fantura Sliding inlets



**The Netherlands**  
Fantura Tunnel inlets



**The Netherlands**  
Ceiling inlets



**USA**  
Fantura Tunnel inlets



**Vietnam**  
Greenline air inlets



**UK**  
Fantura wall inlets

# Intelligent actuator

The Fantura system works in combination with the Fancom climate computer and the intelligent actuators. Depending on the capacity needed, the actuator determines the optimum position of the air inlet, taking into account the Fantura jet stream in the air inlet opening. This guarantees the correct flow of fresh air under all circumstances.

The Fantura system has two types of actuator. Choose the iM.60 to control the air inlets and small air inlet valves, and the iM.125 for more heavy-duty applications. A long service life and reliable control are the key features of our actuators.



# Intelligent control computer

Fancom offers a series of Lumina climate controllers that excel in quality and functionality. In addition, they are also very easy to use. The intelligent control functionality of the Lumina climate computers helps you maximise the benefits of the unique features of the Fantura air inlet systems. The controller automatically optimises the inlet positions to ensure a sufficient supply of fresh air for all animals in the house in all conditions.



## Unique controls

The Lumina climate controllers feature a number of unique controls that create the optimal climate under all conditions. Extreme weather conditions and sharply fluctuating day and night temperatures do not influence the house climate. A few examples:

- The controller always selects the optimal settings for heating and ventilation. This prevents ventilation removing heat from the house unnecessarily and keeps your heating costs under control.
- Minimum ventilation is automatically optimised for the best possible start for young animals.
- Even in the minimum ventilation range, cooled air can flow into the house to prevent heat stress in young animals.
- The ventilation control takes the humidity in the house into account and prevents heat stress.

## Easy operation

The huge advantages of the modern Lumina climate controllers are a clear overview and convenience. Lumina software is characterised by the use of clear icons and colours: green means everything is fine, orange means that some aspect needs your attention. Handy navigation buttons on the main screen give direct access to the most important climate data from the houses. With the Infinia remote app it is even possible to control your Lumina computer remotely through your smartphone.



# Technical specifications

## Inlets

Type	Airflow in m3/h (CFM) Best circumstances pressure Pa (Pascal)				Force	Stroke	Weight	Insulation	Dimension edge		Dimension built-in part		
	10	20	30	40					kg	mm	kg	Rc-value (m2 k/w)	Height (mm)
Fantura inlet >-35°C	2600 (1530 cfm)	3600 (2118 cfm)	-	5000 (2943 cfm)	6 (13.2 lbs)	490 (19.3")	5,2 (11.4 lbs)	0,91	455 (17.9")	970 (38.2")	375 (14.7")	890 (35.0")	136 (5.4")
Fantura inlet >-5°C	2600 (1530 cfm)	3600 (2118 cfm)	-	4800 (2825 cfm)	6 (13.2 lbs)	440 (17.3")	6,6 (14.5 lbs)	0,5	457 (18.0")	913 (35.9")	389 (15.3")	860 (33.9")	141 (5.6")
Fantura ceiling double	3420 (2013 cfm)	4840 (2848 cfm)	-	6970 (4103 cfm)	6,5 (14.3 lbs)	260 (10,2")	3,4 (7.5 lbs)	0,83	710 (27.9")	800 (31.5")	610 (24")	610 (24")	25 (1")
Fantura ceiling single	1608 (947 cfm)	2211 (1301 cfm)	-	3113 (1832 cfm)	3,25 (7.1 lbs)	260 (10,2")	1,8 (4.1 lbs)	0,83	710 (27.9")	485 (19.1")	610 (24")	340 (13.4")	25 (1")
Fantura sliding inlet	2500 (1471 cfm)	3600 (2119 cfm)	4200 (2472 cfm)	5000 (2943 cfm)	3 (6.6 lbs)	420 (16.5")	6,7 (14,8 lbs)	0,91	860 (33.4")	760 (29.2")	763 (29,9")	470 (18,5")	95 (3,8")
Fantura tunnel inlet	26700 (15.700 cfm)	38200 (22.480 cfm)	47450 (27.925 cfm)	53200 (31.315 cfm)	6,5 (14,3 lb)	1300 (51.2")	75 (165 lbs)	0,83	-	-	1905 (75")	1905 (75")	295 (11.6")
Inlet 1500 wall	1000 (9588 cfm)	1500 (882 cfm)	-	2000 (1177 cfm)	4.0	300	3.38	-	-	-	-	-	-
Inlet 1500 wall deflector	1000 (9588 cfm)	1500 (882 cfm)	-	2000 (1177 cfm)	4.0	300	3.74	-	-	-	-	-	-
Inlet 3500 wall	2500 (1471 cfm)	3500 (2060 cfm)	-	4800 (2825 cfm)	6.0	400	6.04	-	-	-	-	-	-
Inlet 3500 wall deflector	2500 (1471 cfm)	3500 (2060 cfm)	-	4800 (2825 cfm)	6.0	400	6.6	-	-	-	-	-	-

## Intelligent actuator

Type	Power supply	Frequency	Current (A)	Capacity (kw)	Thermal protection	Torque (nm)	Tensile force (kg) ø50 mm	Tensile force (kg) ø80 mm	Tensile force (kg) ø106mm	Min/max stroke (cm) ø50mm	Min/max stroke (cm) ø80mm	Min/max stroke (cm) ø106mm	Running speed (revs/min) 50/60hz
iM.125	230Vac	50/60Hz	1.0/1.2	0.09	yes	125	450	300	225	23-195	35-300	50-400	2.0 / 2.4

Type	Power supply	Frequency	Current (A)	Capacity (kw)	Current protection	Pulling torque (nm)	Holding torque (nm)	Tensile force 50/65mm (kg)	Holding force 50/56 mm (kg)	Min. No. Revs	Max. No. Revs.	Running speed (revs/min)	Min/max stroke (ø50mm)	Min/max stroke (ø60mm)
iM.60	24Vac	50/60Hz	0.8	45	yes	60	40	250/190	167/127	0.7	2.7	0.95	11-40 cm	15-53 cm

# Forward thinking

**Fancom BV**

Wilhelminastraat 17  
5981 XW Panningen

P.O. Box 7131  
5980 AC Panningen  
The Netherlands

+31 (0)77 - 306 96 00  
fancom@fancom.com  
www.fancom.com